

Notice of Allowability

Application No.

10/826,086

Examiner

John Kim

Applicant(s)

MIN ET AL.

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/16/04.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 8/27/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Art Unit: 1723

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Renee Barthel on 3/27/06.

The application has been amended as follows:

-Claim 1, line 9: Between "fluid" and "and", -- into the centrifugal field -- has been inserted.

-Claim 1, line 10: Between "components" and "at", -- from the centrifugal field -- has been inserted.

-Claim 1, line 16: Between "a" and "time", -- first -- has been inserted.

-Claim 1, line 17: Between "from" and "and", -- the second location in a direction toward the first location -- has been inserted.

-Claim 2, line 2: Between "the" and "time", -- first -- has been inserted.

-Claim 7, line 1: "1" has been changed to --3--.

-Claim 13, line 3: Between "from" and "and", -- the second location in a direction toward the first location -- has been inserted.

-Claim 14, line 2: "named" has been deleted.

-Claim 15, line 2: Between "the" and "time", -- first -- has been inserted.

-Claim 18, line 2: Between "returning" and "at", -- to the centrifugal field -- has been inserted.

Art Unit: 1723

2. The following is an examiner's statement of reasons for allowance: U.S. Patent No.

5,281,342 (Biesel et al) is considered the closest prior art to the claimed method of claim 1.

Biesel et al teach blood separation method comprising introducing blood into a first separation stage under centrifugation, forming a phase boundary i.e. interface between cells and plasma-rich thrombocytes, shifting boundary positions alternatingly between at least two boundary positions for first and second time intervals by presetting the relationship between the flow rates of the plasma pump and the blood pump (see figures 1-2, 4-5; abstract; col. 2, line 33 – col. 3, line 6; col. 4, line 67 – col. 5, line 45; col. 6, lines 9-47). However, Biesel et al does neither teach nor suggest the steps of moving the interface from the first location to a second location, introducing the first fluid into the centrifugal field and removing at least one of the first and second components from the centrifugal field at known controlled flow rates so as to move the interface from the second location in a direction toward the first location and to return the interface to the second location and determining the flow rate of first or second component within the first fluid, such determining being based, at least in part, on a first time interval between when the interface moves from the second location in a direction toward the first location and returns to the second location. U.S. Pat. No. 5,876,321 and 6,878,105 and 6,524,231 teach a blood separation method comprising moving an interface between blood components from one location to another and back; however, none of above prior art of record teaches or suggests the above patentably distinguishable step.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 1723

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. The drawings filed 4/16/04 are acceptable.
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is 571-272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John Kim
Primary Examiner
Art Unit 1723

JK
March 27, 2006